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Proposed programme budget for the biennium 1996-1997*

Part XI Capital expenditures

Section 30
Technological innovations

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* The present document contains section 30 of the proposed programme budget for the biennium 1996-1997. The complete proposed programme budget will subsequently be issued in final printed form as *Official Records of the General Assembly, Fiftieth Session, Supplement No. 6* (A/50/6/Rev.1).

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Part XI
Capital expenditures

Section 30
Technological innovations

Overview

30.1 The activities under this section relate to subprogramme 4, Technological innovations policies, of programme 40, Administrative direction and management, of major programme IX, Common support services, of the medium-term plan for the period 1992-1997, as revised (A/47/6/Rev.1). The main objective of the subprogramme is to develop and coordinate the establishment of policies and procedures related to the introduction of technological innovations at all duty stations of the Secretariat and to ensure adherence to standards and compatibility of technology among duty stations. Improved telecommunications and the requirements for fast and simple electronic voice exchange among all duty stations have created the need to harmonize existing technologies, prevent future incompatibilities and ensure efficient and cost-effective use of the technologies. Emphasis is placed on integrating duty stations into a fully functioning data-processing and communications network through the development, coordination and monitoring of policies, strategies and standards on an organization-wide basis.

30.2 The Integrated Management Information System (IMIS), the first phase of which was approved by the General Assembly in section XII of its resolution 43/217 of 21 December 1988, is a significant step towards the electronic integration of offices performing administrative tasks, regardless of location. The first phase of the project has involved designing and implementing modules that provide most of the functionalities needed by the Organization, as well as modules providing bridges with existing systems. It is anticipated that development of the first phase should be completed during the biennium 1994-1995 and that installation at all major offices should be completed during 1996-1997. The system has also been adopted by the International Labour Office, which implemented the first part of the applications in March 1995, and UNDP, which plans to implement the first part of the system by the end of 1995.

30.3 Subsequent phases may be proposed in future, with modules being added whose existence and utility are contingent upon the design and implementation of the modules comprising this first phase. Such phases would probably be completed mainly by staff assigned to the maintenance of the system.

30.4 The other major project under this section is the optical disk system for storage and retrieval of documentation, approved by the General Assembly in its resolution 44/201 of 21 December 1989. All documents issued in New York and Geneva since 1992 are currently in the system, and documents issued at other duty stations and during special conferences should be added by the end of 1995 as those duty stations gain access to the system. As use of the system grows, it is anticipated that print-runs and stocks of documents can be reduced. The possibility of generating CD-ROM products from the system for sale to the general public is also being considered by the Sales Section.

Table 30.1 **Summary of requirements by programme**
(Thousands of United States dollars)

(1) *Regular budget*

Programme	1992-1993 expenditures	1994-1995 appropriations	Resource growth: Amount	Resource growth: Percentage	Total before recosting	Recosting	1996-1997 estimates
A. Integrated Management Information System	6 867.4	20 000.8	(1 445.0)	(7.2)	18 555.8	1 030.2	19 586.0
B. Optical disk storage and retrieval system	1 687.9	5 397.5	(3 215.3)	(59.5)	2 182.2	108.3	2 290.5
Total	**8 555.3**	**25 398.3**	**(4 660.3)**	**(18.3)**	**20 738.0**	**1 138.5**	**21 876.5**

(2) *Extrabudgetary resources*

1992-1993 expenditures	1994-1995 estimates	Source of funds	1996-1997 estimates
		(a) Services in support of:	
—	—	(i) United Nations organizations	—
		(ii) Extrabudgetary activities	
875.0	3 366.9	Technical cooperation reimbursement resources	—
3 950.9	2 558.1	Peace-keeping operations	—
		(b) Substantive activities	
30.6	—	Trust Fund for Management Improvement and Systems Development	—
—	—	(c) Operational projects	—
Total	**4 856.5**	**5 925.0**	—
Total (1) and (2)	**13 411.8**	**31 323.3**	**21 876.5**

Table 30.2 **Summary by object of expenditure**
(Thousands of United States dollars)

(1) *Regular budget*

Object of expenditure	1992-1993 expenditures	1994-1995 appropriations	Resource growth: Amount	Resource growth: Percentage	Total before recosting	Recosting	1996-1997 estimates
Other staff costs	—	436.7	2 973.9	680.9	3 410.6	164.7	3 575.3
Contractual services	9.5	4 397.6	(1 919.1)	(43.6)	2 478.5	119.5	2 598.0
General operating expenses	809.2	1 743.2	1 670.0	95.8	3 413.2	166.8	3 580.0
Equipment	869.2	3 860.7	(3 712.2)	(96.1)	148.5	7.1	155.6
Other	6 867.4	14 960.1	(3 672.9)	(24.5)	11 287.2	680.4	11 967.6
Total	**8 555.3**	**25 398.3**	**(4 660.3)**	**(18.3)**	**20 738.0**	**1 138.5**	**21 876.5**

(2) *Extrabudgetary resources*

1992-1993 expenditures	1994-1995 estimates	Object of expenditure	1996-1997 estimates
4 825.9	5 925.0	Other	—
4 825.9	**5 925.0**		—
13 381.2	**31 323.3**		**21 876.5**

A. Integrated Management Information System

Table 30.3 **Summary by object of expenditure**
(Thousands of United States dollars)

(1) *Regular budget*

Object of expenditure	1992-1993 expenditures	1994-1995 appropriations	Resource growth		Total before recosting	Recosting	1996-1997 estimates
			Amount	Percentage			
Other staff costs[a]	—	436.7	2 973.9	680.9	3 410.6	164.7	3 575.3
Contractual services[a]	—	4 397.6	(1 919.1)	(43.6)	2 478.5	119.5	2 598.0
General operating expenses[a]	—	206.4	1 173.1	568.3	1 379.5	65.6	1 445.1
Other[b]	6 867.4	14 960.1	(3 672.9)	(24.5)	11 287.2	680.4	11 967.6
Total	**6 867.4**	**20 000.8**	**(1 445.0)**	**(7.2)**	**18 555.8**	**1 030.2**	**19 586.0**

(2) *Extrabudgetary resources*

1992-1993 expenditures	1994-1995 estimates	Object of expenditure	1996-1997 estimates
		(a) Services in support of:	
—	—	(i) United Nations organizations	—
		(ii) Extrabudgetary activities	
875.0	3 366.9	Technical cooperation reimbursement resources	—
3 950.9	2 558.1	Peace-keeping operations	—
		(b) Substantive activities	
30.6	—	Trust Fund for Management Improvement and Systems Development	—
—	—	(c) Operational projects	—
4 856.5	**5 925.0**		—
13 411.8	**25 925.8**		**19 586.0**

[a] Maintenance costs.
[b] Project costs.

30.5 In its resolution 43/217, the General Assembly approved the implementation of phase one of the IMIS project. Phase one involves designing and implementing modules that provide the large majority of the functionalities needed by the Organization and modules that provide bridges with existing systems. It is intended to complete development work during the biennium 1994-1995 and the installation of the system at all major offices during 1996-1997. In subsequent phases, modules whose existence and utility are

contingent upon the design and implementation of the modules built in the first phase may be added, although it is likely that they would be completed primarily by staff assigned to system maintenance.

30.6 The Secretary-General has submitted six progress reports on the implementation of the project to the General Assembly, at its forty-fourth to forty-eighth sessions (A/C.5/44/8, A/C.5/45/20, A/C.5/46/24, A/C.5/47/27 and A/C.5/48/12 and Add.1). A follow-up report (A/C.5/49/41) was considered by the Assembly at its forty-ninth session, as was a report by the Board of Auditors (A/49/680) on a special audit of IMIS requested by the Assembly. In the sixth progress report, the Secretary-General submitted revised estimates on the total cost of the project and, in the subsequent follow-up report, requested an additional appropriation of $7,337,200. The Board of Auditors confirmed that these estimates were fundamentally sound, although it recommended an increase of $1.5 million in the estimate for contractual services and noted that, as with all complex projects of this nature, further difficulties were not inconceivable. Based on the recommendations of the Advisory Committee on Administrative and Budgetary Questions, the Assembly approved the additional appropriation requested, less $1 million for equipment in respect of which disbursements are not anticipated until early 1996.

30.7 The installation of the IMIS system at Headquarters should be completed by early 1996. The main focus of activity in 1996-1997 will be the installation of the system at offices away from Headquarters, the establishment of a long-term maintenance infrastructure and the consolidation of the organizational and procedural changes introduced through the implementation of the system. A major activity will concern software modifications that may be required, as is normal in the period immediately following implementation of major systems. This will be one of the main tasks entrusted to the maintenance team that will also be established during 1996-1997.

30.8 During 1996-1997, major activities will include implementation of the payroll module, training of users world wide in the use and maintenance of the system, completion of the implementation, begun in 1995, of the human resources applications at offices away from Headquarters and implementation of finance applications at offices away from Headquarters.

30.9 At the same time, a maintenance structure will be phased in progressively to replace the development and implementation team. Its main activities will include software modifications, development of additional management reports, technical maintenance of the software world wide, further integration of the system with existing systems not to be replaced by IMIS and support for other small systems to be developed for specific purposes using IMIS data. Maintenance activities are essential in order to preserve the investment made in the construction and deployment of the system. The errors made in the past of not properly maintaining and updating existing systems, that led to the need for IMIS and to the current use of very obsolete systems that do not meet the requirements of the Organization, will be avoided through the proper maintenance and updating of IMIS.

Table 30.4 **Revised estimates for the Integrated Management Information System 1989-1997**

(At current prices)
(Thousands of United States dollars)

	Expenditure 1989-1993	*Estimate 1994-1995*	*Estimate 1996-1997*	*Estimated total 1989-1997*
Project budget				
General temporary assistance	4 116.7	5 972.7	4 194.4	14 283.8
Travel	395.9	877.3	1 340.6	2 613.8
Training	1 077.3	2 927.4	1 535.7	5 540.4
Contractual services	19 062.6	11 694.9	3 712.9	34 470.4
Communications	111.0	80.0	81.1	272.1
Supplies and miscellaneous expenses	99.9	105.0	91.3	296.2
Hardware	1 288.3	1 126.7	1 011.6	3 426.6
Software	859.9	1 550.0	—	2 409.9
Total	**27 011.6**	**24 334.0**	**11 967.6**	**63 313.2**
Maintenance budget				
General temporary assistance	—	436.7	3 575.3	4 012.0
Contractual services	—	4 397.6	2 598.0	6 995.6
Hardware/software	—	206.4	1 445.1	1 651.5
Total	**—**	**5 040.7**	**7 618.4**	**12 659.1**
Grand total	**27 011.6**	**29 374.7**	**19 586.0**	**75 972.3**

[a] Including the following adjustments to the accounts made in 1994: an increase of $1,023,100 under training; a decrease of $92,300 under contractual services; and a decrease of $97,800 under hardware.
[b] At 1996-1997 rates.

30.10 The current estimates for the project budget are based on those included in the sixth progress report, as adjusted for the factors described in paragraph 30.6 above and for recosting at 1996-1997 rates.

30.11 As regards the maintenance budget, provision is made for the creation of a maintenance structure that would progressively replace the current development team. The forthcoming biennium will be a transitional period during which many activities will be run in parallel, using both old systems and IMIS, until the entire system is deployed at all duty stations. The maintenance structure will include staff redeployed from within the Office of Conference and Support Services, the Office of Human Resources Management and the Office of Programme Planning, Budget and Accounts. During the transitional period, however, not all posts that will become redundant because of the introduction of the system will be available for redeployment. Accordingly, the estimates included in the sixth progress report have been modified to include $3.5 million for general temporary assistance.

30.12 Further details will be provided in a seventh progress report to be submitted to the General Assembly at its fiftieth session.

Project budget (1996-1997 rates)

30.13 As indicated in table 30.4 above, the total project budget is now estimated at $63,313,200, with requirements of $11,967,600 in 1996-1997. This figure is based on the estimates contained in the sixth progress report on IMIS and also includes provision for equipment deferred from 1994-1995 ($1 million at initial 1994-1995 rates) and the additional amount recommended by the Board of Auditors for contractual services ($1.6 million at initial 1994-1995 rates), as well as recosting to 1996-1997 rates.

General temporary assistance

30.14 Estimated requirements of $4,194,400 relate to continuation of the project team and provision for local coordinators and technical support staff at offices away from Headquarters. The project team will be phased out progressively between the first half of 1996 and the second half of 1997, as elements of the system are implemented. At offices away from Headquarters, local coordinators will remain on board until the end of 1997 to ensure a consolidation of the activities after the implementation of the system, and technical support staff will remain on board for part of 1996 to complete the local technical installations.

Travel

30.15 A provision of $1,340,600 is requested for travel in connection with the implementation of the system at offices away from Headquarters. Technical implementation teams, human resources teams and budget and finance teams, all composed of staff and contractors, will travel to all duty stations for periods of one to ten weeks, in connection with the implementation of the various parts of the system. Provision is also made for travel by project staff.

Training

30.16 Training costs of $1,535,700 are estimated for the training of staff at Headquarters for payroll and training of staff at offices away from Headquarters (up to 1,000 staff) in all the IMIS applications. Provision is also made for training of one staff member per office away from Headquarters, for familiarization with the actual operations of the financial applications at Headquarters.

Contractual services

30.17 Contractual costs, estimated at $3,712,900, relate mainly to the completion of the development of the software and to implementation activities at offices away from Headquarters, including assistance to users, installation of software and drafting and adaptation of manuals. Contractors will form part of the implementation teams to be sent to all offices to ensure a successful and smooth transition to the new system and working procedures and methods.

Communications, supplies and miscellaneous expenses

30.18 Operating requirements of $172,400 have been estimated on the basis of actual expenditure patterns thus far and relate to communications with and mailing to offices away from Headquarters and normal office and data-processing supplies.

Hardware and software

30.19 No expenses are expected for software acquisition. A provision of $1,011,600 for the purchase of a server at Headquarters for the Organization's world-wide database was deferred from 1994-1995, as disbursement of related funds is not anticipated before early 1996.

Resource requirements (at current rates)

Other staff costs

30.20 Estimated requirements of $3,410,600 relate to the progressive replacement of the development implementation team by staff members whose main focus will be the maintenance of the system and of related systems to be developed. The activities to be implemented will include analysis, programming and technical software maintenance such as database administration, table maintenance, configuration management and help desk coordination. The maintenance structure, which will subsequently be integrated into the Electronic Services Division, will also provide support to the information units existing or to be created within the Office of Conference and Support Services, the Office of Human Resources Management and the Office of Programme Planning, Budget and Accounts. The maintenance team will also include nine staff members redeployed from within the Department of Administration and Management. All maintenance activities will be performed at Headquarters.

Contractual services

30.21 Estimated requirements of $2,478,500 for contractual services relate mainly to support to the IMIS maintenance team for system modifications and improvements, training and, during the initial phase, supervision of the United Nations team and for help desk activities during 1996, mainly to support the

United Nations team during the implementation phase at offices away from Headquarters. These estimates reflect those in the sixth progress report, as recosted, and were reviewed by the Board of Auditors.

General operating expenses

30.22 Estimated general operating expenses would cover the maintenance costs of the commercial software, database management system, procurement software and others, and of the hardware (main computers) used for the system at all duty stations. The estimate of $1,379,500 is based on an average maintenance cost, established at the time of the initial purchase, of 15 per cent of the initial purchase cost.

Other

30.23 Estimated requirements of $11,287,200 ($11,967,600 at 1996-1997 rates) relate to the estimated project budget in 1996-1997. The details of these requirements are set out above.

B. Optical disk storage and retrieval system

Table 30.5 **Summary by object of expenditure**
(Thousands of United States dollars)

Object of expenditure	*1992-1993 expenditures*	*1994-1995 appropriations*	*Resource growth*		*Total before recosting*	*Recosting*	*1996-1997 estimates*
			Amount	*Percentage*			
Contractual services	9.5	—	—	—	—	—	—
General operating expenses	809.2	1 536.8	496.9	32.3	2 033.7	101.2	2 134.9
Equipment	869.2	3 860.7	(3 712.2)	(96.1)	148.5	7.1	155.6
Total	**1 687.9**	**5 397.5**	**(3 215.3)**	**(59.5)**	**2 182.2**	**108.3**	**2 290.5**

30.24 The optical disk storage and retrieval system, approved by the General Assembly in its resolution 44/201, is a fully operational system for the storage of United Nations parliamentary documentation on optical disk as coded text or image-based documents. It allows on-line retrieval of such documents by remote computer workstations for display on screen or for print-out and is now one of the most widely used computer applications in the Secretariat after word-processing and electronic mail.

30.25 The long-term goal of this system is to establish more economical and secure means of distributing and storing parliamentary documentation and to provide timely access to such documents in electronic form to all offices of the United Nations, to missions to the United Nations and other government offices as appropriate, to other organizations of the United Nations system, to the mass media, to other international organizations and to other interested institutions, such as libraries and universities. Now in its third year of full operation, the system provides for electronic archiving and distribution of documents in all six official languages.

30.26 The objectives of the system are to increase the speed and reduce the costs of world-wide distribution; to provide more economical and secure means of storage; to facilitate reference to these documents by users world wide; and to provide a central repository of electronic documents for United Nations staff members involved in the preparation and processing of parliamentary documentation.

30.27 The parliamentary documentation is stored on-line in databases at United Nations Headquarters in New York and the United Nations Office at Geneva, and described and indexed using the structure and descriptors of the United Nations Bibliographic Information System (UNBIS). All documents issued in Geneva and New York are available on the system from 1992 onwards. By the end of 1995, documents issued at Vienna, Nairobi, Addis Ababa, Amman, Bangkok and Santiago, as well as at special conferences around the world, should also be available on the system, since all duty stations should have access to the system in Geneva or New York by then.

30.28 As of April 1995, 37,500 documents had been stored in the optical disk system in all official languages. As of the same date, 150 workstations had been connected to the system within the Secretariat as well as 20 permanent missions in New York and 22 at Geneva. With the installation of expanded access capacity, this number should grow during 1996-1997 to 1,000 workstations and 60 Permanent Missions in New York and 500 workstations and 60 permanent missions at Geneva. Access should also be available to users at Vienna, Nairobi and the regional commissions. In addition, Governments of Member States are starting to request access to the system via Geneva or New York after a successful initial trial demonstrated the feasibility of such connections.

30.29 Access to outside users through the INTERNET is also anticipated by the first half of 1996. It is also expected that during 1996-1997, there will be widespread use of printing on demand of copies of documents from the optical disk. Together with the electronic distribution and retrieval of documents, this feature should result in a considerable reduction of paper copies printed, distributed and stocked. The Sales Section is also exploring offering CD-ROM products generated from the optical disk system as well as on-line access to the system.

Resource requirements (at current rates)

General operating expenses

30.30 With the full installation of the system in New York and Geneva, requirements in 1996-1997 relate primarily to facilities management services, including provision for a second shift for help desk support and computer operations as use of the system grows, and to maintenance of and supplies for the system.

30.31 A provision of $2,033,700 is proposed for:

(a) Facilities management services for New York ($592,100) and for Geneva ($589,500);

(b) Maintenance of equipment for New York ($394,700) and for Geneva ($218,300);

(c) Rental and maintenance of two jukeboxes, one each for New York ($113,500) and for Geneva ($125,600).

Equipment

30.32 A provision of $148,500 is proposed for:

(a) Acquisition of 60 (30 in New York and 30 at Geneva) additional access ports to allow Member States to use the system from their capitals ($117,200);

(b) Acquisition of 32 additional optical disk platters ($31,300).